PENICILLINS AND CEPHALOSPORINS AND PROCESS FOR PRODUCING THE SAME

Patent number: DE2519400

Publication date: 1976-03-04

Inventor: SAIKAWA ISAMU (JP); TAKANO SHUNTARO (JP); YOSHIDA CHOSAKU (JP); TAKASHIMA OKUTA (JP); MOMONOI KAISHU (JP); KURODA SEIETSU (JP); KOMATSU MIWAKO (JP); YASUDA TAKASHI (JP); KODAMA YUTAKA (JP)

Applicant: TOYAMA CHEMICAL CO LTD

Classification:

- international: C07D501/14

- european: C07D241/08; C07D499/00

Application number: DE19752519400 19750430

Priority number(s): JP19750037207 19750327; JP19740050663 19740509; JP19740052254 19740513; JP19740060787 19740531; JP19740091996 19740813; JP19740109954 19740926; JP19740142499 19741213

Also published as:

NL7505375 (A)
GB1508064 (A)
GB1508062 (A)
FR2320295 (A1)
FR2269937 (A1)

more >>

Abstract not available for DE2519400

Abstract of corresponding document: **GB1508062**

1508062 Penicillin and cephalosporin deriva- tives TOYAMA CHEMICAL CO Ltd 28 April 1975 [9 May 1974 13 May 1974 31 May 1974 24 July 1974 7 Aug 1974 13 Aug 1974 26 Sept 1974 12 Oct 1974 28 Oct 1974 6 Dec 1974 13 Dec 1974 17 Feb 1975 26 March 1975 27 March 1975] 17557/75 Heading C2C Novel compounds I (R is an amino acid residue; R<SP>1</SP> is H, an ester forming group, a cation or a silicon-, phos- phorus-, or tin-containing group; n is 1 or 2; n X's which may be the same as or different from each other represent individually O or S and are linked in any combination at the 2-, 3- and 5-positions of the piperazine ring; m is 4-n; each pair of R<SP>2</SP> and R<SP>3</SP> is linked to the same carbon atom and m pairs of R<SP>2</SP> and R<SP>3</SP> represent individually H, halo, COOH, or an unsubstituted or substituted alkyl, cycloalkyl, aryl, acyl, aralkyl, alkoxycarbonyl-alkyl, acyl- oxyalkyl, alkoxy, alkoxycarbonyl, cycloalkoxy- carbonyl, aralkoxycarbinyl, aryloxycarbonyl, amino or carbamoyl; or R<SP>2</SP> and R<SP>3</SP> together with the attached carbon atom form a cyclo- alkane ring; A is H, OH, NO 2 , CN or an option- ally substituted alkyl, alkenyl, alkynyl, alka- dienyl, cycloalkyl, cycloalkenyl, cycloalka- dienyl, aryl, acyl, aralkyl, acyloxyalkyl, alkoxy, cycloalkoxy, aryloxy, alkoxycarbonyl, cyclo- alkoxycarbonyl, aryloxycarbonyl, aralkoxy- carbonyl, alkylsulphonyl, cycloalkylsulphuryl, arylsulphonyl, carbamoyl, thiocarbamoyl, acyl- carbamoyl, acylthiocarbamoyl, alkylsulphonyl- carbamoyl, arylsulphonylcarbamoyl, alkylsul- phonylthiocarbamoyl, arylsulphonylthiocarba- moyl, sulphamoyl, alkoxycarbonylthioalkyl, alkoxythiocarbonylthioalkyl, amino or hetero- cyclyl; Y is O or S; -Z- is -C(CH 3) 2 - or -CH 2 C(CH 2 R<SP>4</SP>)= and R<SP>4</SP> is H, OH, CN, N 3 , quaternary ammonium or an optionally sub- stituted alkoxy, aryloxy, aralkoxy, acyloxy, carbamoyloxy, guanidino, amino, alkylthio, arylthio, aralkylthio, acylthio, thiocarbamoyl- thio, alkoxythiocarbonylthio, aryloxythio- carbonylthio, cycloalkoxythiocarbonylthio, ami- dinothio or heterocyclyl-thio) are prepared by conventional acylation of a compound II or IV followed where necessary by conventional chemical modification of the side chain in the cephalosporin nucleus. Pharmaceutical compositions useful as anti- bacterial agents comprise a compound I together with a suitable diluent and/or carrier.